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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/764,525

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EXAMINER

KIM, SUN M

ART UNIT

PAPER NUMBER

2813

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/764,525	Applicant(s) KOO, JAE-BON	
	Examiner SUN M. KIM	Art Unit 2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 14-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/13/06, 6/29/07, 5/5/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the Applicant Election filed on May 1, 2008.

Election/Restrictions

1. Applicant's election with traverse of the Restriction Requirement in the reply filed on May 1, 2008 is acknowledged. The traversal is on the ground(s) that no serious burden exists and that Groups I and II were of the same embodiment. This is not found persuasive because inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process as shown in the Restriction Requirement sent on April 1, 2008. Also, Applicant points out that no serious burden exists due to an overlap in the two class/subclasses given for Groups I and II, however, this is not an indication of a lack of burden. The cited references which belong to both class/subclasses give is merely an indication of an overlap.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 14 – 17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected method of manufacture, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on May 1, 2008.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1 – 3, 6 – 7, 10 – 13, and 18 – 19** are rejected under 35 U.S.C. 102(b) as being anticipated by Nozawa et al. (JP 2003-15548).

5. **In re claim 1**, Nozawa et al. shows a flat panel display, comprising (Figure 3):

- a gate line 33, a data line 31 and a power supply line 32 formed on an insulation substrate 52;
- a pixel region defined by the gate line 33, the data line 31 and the power supply line 32 (also Figure 1);
- and a pixel comprising a pixel electrode 19 arranged in the pixel region, the pixel electrode 19 being formed on the same layer as the power supply line 32.

6. **In re claim 2**, Nozawa et al. shows that the power supply line 32 being formed on a layer different from the gate line 33 and data line 31 (Figure 1).

7. **In re claim 3**, Nozawa et al. teaches that the power supply line 32 and pixel electrode 19 both being formed of the same material (Figure 3).

8. **In re claim 6**, Nozawa et al. teaches a flat panel display, comprising (Figure 3):

- a thin film transistor comprising source and drain electrodes 39A/19A, formed on an insulation substrate 52;
- an insulation film 57 formed on the insulation substrate 52 and on the thin film transistor, the insulation film 57 being perforated by first and second contact holes exposing the source and drain electrodes 39A/19A respectively;
- a pixel electrode 19 formed on the insulation film 57 and connected to one of the source and drain electrodes through one of the first and second contact holes; and
- a power supply layer 32 formed on the insulation film and connected to the other one of the source and drain electrodes through the other one of the first and second contact holes.

9. **In re claim 7**, Nozawa et al. teaches that the power supply layer 32 and pixel electrode 19 being formed of the same material (Figure 3).

10. **In re claim 10**, Nozawa et al. teaches flat panel display, comprising (Figures 1 and 3):

- an insulation substrate 52 divided into a plurality of pixel regions and comprising a plurality of thin film transistors, each thin film transistor being arranged in corresponding ones of said plurality of pixel regions;
- an insulation film 57 formed on the substrate 52;
- a plurality of pixel electrodes 19 formed on the insulation film 57 and being electrically connected to corresponding ones of said plurality of thin film transistors 37 in corresponding ones of said plurality of pixel regions; and

- a power supply layer 32 formed on the insulation film 57 such that the power supply layer 32 is electrically separated from the plurality of pixel electrodes 19, said power supply layer 32 being electrically connected to each of the plurality of thin film transistors 37 and supplying power to each of the plurality of thin film transistors 37.

11. **In re claim 11**, Nozawa et al. teaches that the power supply layer 32 being formed in a grid shape in which corresponding ones of said plurality of pixel electrodes 19 being disposed in each grid (Figure 1).

12. **In re claim 12**, Nozawa et al. teaches that the power supply layer 32 being formed in a line shape in which the power supply layer 32 is arranged between corresponding ones of said plurality of pixel electrodes 19, said power supply layer 32 being arranged in one of a row or a column (Figure 1).

13. **In re claim 13**, Nozawa et al. teaches that the power supply layer 32 having a surface electrode shape in which the power supply layer 32 is formed on a whole surface of the substrate 52 and being electrically separated from each of the plurality of pixel electrodes 19 (Figure 1).

14. **In re claim 18**, Nozawa et al. teaches that a gate line 33, a data line 31 and the power supply line 32 are formed on the insulating substrate 52; the gate line 33 and data line 31 being formed on a layer different from the power supply layer 32 (Figure 1). It should be noted that this is a product-by-process claim. It has been held that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a

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product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" (In re Thorpe, 227 USPQ 964, 966, 1985, also MPEP § 2113).

15. **In re claim 19**, Nozawa et al. teaches that the power supply line 32 and pixel electrode 19 both being formed of the same material (Figure 3). It should be noted that this is a product-by-process claim. It has been held that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" (In re Thorpe, 227 USPQ 964, 966, 1985, also MPEP § 2113).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. **Claims 4 – 5, 8 – 9 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nozawa et al. in view of Koyama (US PGPub 2003/0117083).

18. **In re claims 4 – 5, 8 – 9, and 20**, Nozawa et al. does not teach that electrode 19 is made from a material meeting the claimed characteristics, however, Koyama et al. teaches that electrode 49 can be gold (Figure 4). It would have been obvious to one having ordinary skill in the art at the time of the invention to use gold for a pixel electrode since doing so would allow for one to make a top emitting device such as shown by Koyama. Gold has low resistivity and high reflectivity. It should be noted that claim 20 is a product-by-process claim. It has been held that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" (In re Thorpe, 227 USPQ 964, 966, 1985, also MPEP § 2113).

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Inukai (US Patent 7,230,591), Yamazaki et al. (US Patent 6,825,496), and Anzai (US Patent 6,798,405) teach light emitting devices that are powered through thin film transistors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUN M. KIM whose telephone number is (571)270-

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1431. The examiner can normally be reached on Monday - Thursday 10:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carl Whitehead Jr./
Supervisory Patent Examiner, Art Unit 2813

/SMK/ 7/21/08